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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,613

07/21/2005

Gottfried Durr

2322.72131

9023

24978

7590

11/15/2006

GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

WALBERG, TERESA J

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/518,613

Applicant(s)

DURR ET AL.

Examiner

Teresa J. Walberg

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/27/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

1. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper.

The final two paragraphs on page 18 of the specification are interpreted as an incorporation of essential material by reference to foreign patent documents. If the foreign patent documents in question contain essential material, Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the present drawings are informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. Claim 3 is objected to because of the following informalities: Claim 3 states that the stabilizing device is mounted to at least one side wall. However, the disclosed

stabilizing device is unitary with the wall, rather than being a separate part mounted to the wall. It has been assumed for purposes of this office action that use of the phrase "mounted to" was inadvertent. Appropriate correction is required.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rhodes et al (6,216,777).

Rhodes et al disclose a heat exchanger as claimed including at least one header tank (16, Fig. 3D) having at least two header chambers (18 and 20) defined by a base device and a top device (Fig. 3D), the top device including a first middle side wall and a second middle side wall (Fig. 3D), a lateral distance between the first and second middle side walls increasing with the distance from the base device (Fig. 3D), the gap being V-shaped (Fig. 3D), the top and base device being manufactured integrally (col. 3, lines 27-29), a connection aperture being arranged on a longitudinal side section (Fig. 2D), the base and top being formed of a pretreated plate (col. 3, lines 63 and 64).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al (6,216,777) in view of Patel et al (5,761,808).

Rhodes et al disclose a heat exchanger as claimed with the exception of at least one partition including a guiding crease and a contact region of the middle side walls with the base device including a base recess.

Patel et al disclose providing a guiding crease (34) and a base recess (34) for a unitary header (see Fig. 6).

It would have been obvious in view of Patel et al to provide a guiding crease and a base recess for a header as taught by Rhodes, the motivation being to remove the need to provide additional folds in the base.

8. Claims 3-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al (6,216,777) in view of Laveran et al (5,492,172).

Rhodes et al disclose a heat exchanger as claimed with the exception of stabilizing device in the form of grooves or creases. Laveran et al disclose providing a grooves or creases for strengthening a header (see Figs. 2-4).

It would have been obvious in view of Laveran et al to provide a stabilizing device in the form of grooves or creases in a header as taught by Rhodes, the motivation being to strengthen the header.

9. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al (6,216,777) in view of Hagemeister (4,815,535).

Rhodes et al disclose a heat exchanger as claimed with the exception of flat tubes having a smaller wall thickness in the region of a flange than a radius.

Hagemeister discloses a heat exchanger having flat tubes that appear to have a smaller wall thickness in the region of a flange than a radius. (see Fig. 5).

It would have been obvious in view of Hagemeister to use flat tubes having a smaller wall thickness in the region of a flange than a radius in the heat exchanger of Rhodes et al, the motivation being to increase the surface area of the tube and make them easier to position.

10. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al (6,216,777) in view of Jung et al (DE 19826881).

Rhodes et al disclose a heat exchanger as claimed with the exception of the side wall including at least one tab which is inserted in a recess of the base device.

Jung et al disclose a heat exchanger as claimed in which a side wall of the header including at least one tab which is inserted in a recess of the base device (see Fig. 3).

It would have been obvious in view of Jung et al to use a header in which a side wall includes at least one tab which is inserted in a recess of the base

device in the heat exchanger of Rhodes et al, the motivation being to enable easier manufacture of the device.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jalilevand et al, Hayashi, and Fischer et al are cited to show shaped headers. Pogue is cited to show a stabilizing device mounted to a header.

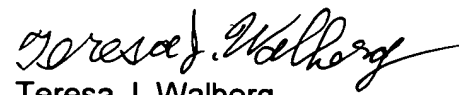
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "Teresa J. Walberg". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Teresa J. Walberg
Primary Examiner
Art Unit 3744

tjw